

REMARKS

By the present paper, no claims are amended, cancelled, or added. Claims 1 - 22 are in the application. The Examiner withdrew claims 1 - 11 and 13. Claims 12 and 14 -22 are in examination.

Reconsideration of the Application is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103:

Claims 12 and 14 - 22 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Tadashi et al., JP 10001410 (Tadashi et al.). Applicants respectfully traverse.

The characteristic feature of the present invention resides in treating skin with the skin conditioner for “improving moisture retention ability of skin” as defined in claim 12, not simply improving moisture retention *per se*. By improving the skin moisture retention ability, various kinds of skin diseases can be treated as mentioned in the present specification. The meaning of “improving moisture retention ability of skin” of the present invention is different from, for example, the mechanism of a conventional humectant or moistener, as explained in detail below.

A conventional humectant or moistener temporarily maintains moisture in the corneal layer of skin, or provides a barrier function at the surface of the skin to temporarily prevent evaporation of moisture from the skin. A humectant does not directly act on an epidermal function of the skin so that when use or application of the humectant to the skin is stopped, the skin returns to the previous state of hydration.

On the other hand, the skin conditioner for improving a skin moisture retention ability of the present invention improves the moisture retention ability of the corneal layer of the epidermis, as compared to the state of innate moisture retention ability before application of the agent. The skin conditioner of the present invention does not simply maintain moisture of the skin temporarily and does not simply provide a barrier function for the skin. Rather, the skin conditioner of the present invention normalizes the function of the corneal layer of epidermis of the skin.

That is, in the conventional humectant or moistener, moisture in the corneal layer is maintained by a water-absorbing function possessed by a component of the humectant or moistener. This effect exists in the corneal layer only when the agent is present in the corneal layer. In contrast, in the skin conditioner for improving skin moisture retention ability of the present invention, even after a longer time after application, a moisture retention ability of the skin is improved and the improved state can be maintained even long after application. The moisture retention ability of the corneal layer of epidermis *itself* is improved.

The reason why the skin conditioner of the present invention can improve the skin moisture retention ability of the corneal layer of epidermis is different from the humectant effect. The skin conditioner of the present invention improves the function of the skin itself by a certain function and mechanism.

To illustrate, Applicants call attention to, for example, Fig. 51 and Test Example 16 on pages 65-66 of the present specification. In this test, Examples 6 and 8 are moisture retention ability improving agents according to the present invention. Comparative examples 1 and 2 are conventional humectants. As shown in Figs. 51-52 (pages 34/38 and 35/38 of the drawings), even when application of the skin conditioner is discontinued, the effect of improved moisture retention ability can be maintained for at least as long as 2 weeks (see right end graph in Figs. 51 and 52). The same effects can be also obtained in the method for improving moisture retention ability of the present invention (i.e., Examples 55-59, specifically Example 59 shown in Fig. 55 (see right end graph in Fig. 55 on page 38/38 of the drawings)).

The effect of improved moisture retention ability provided by the skin conditioner of the present invention is maintained 2 weeks *after* discontinuation of application. It has been reported that the "life cycle" of the corneal layer is about 4 weeks. Formation of the corneal layer by cells of stratum basale epidermidis takes about 2 weeks, and peeling of the cells formed at the corneal layer as a dirt takes about 2 weeks.

Accordingly, the corneal layer 2 weeks after last application of the skin conditioner according to the present invention is formed after stopping the application (i.e., formed during the term not applied the skin conditioner to the skin) and it is clear that during the term of

formation of the new corneal layer, no skin conditioner according to the present invention exists in the skin. In spite of cessation of application of the skin conditioner for 2 weeks, remarkable improvement in moisture retention ability of the corneal layer applied two weeks prior means that a function possessed by the newly formed corneal layer itself has been improved by acting the method of the present invention directly onto the skin during the application of the skin conditioner.

Therefore, the skin conditioner for improving a skin moisture retention ability of the present invention directly acts on the skin itself by applying it to the surface of the skin so that a corneal layer having good quality is formed continuously whereby its moisture retention ability is fundamentally improved.

Accordingly, the skin conditioner for improving a skin moisture retention ability of the present invention, which improves the moisture retention ability of the corneal layer by directly acting onto the skin itself, whereby a corneal layer having good quality is formed continuously, is clearly differentiated from the conventional humectants or other skin conditioners which do not have such a function and effects.

The cited reference, Tadashi, et al. (JP 10-001410A) discloses cosmetics containing at least one fibroblast collagenase production-promoting substance selected from serine or a derivative thereof, and ethanolamine or derivatives thereof and epidermal cell ceramide synthesis-promoting substance, and the cosmetics have an excellent skin aging-preventive effect.

In Tadashi, et al., it is disclosed that “one or two or more components selected from the group consisting of a serine and a derivative thereof, or ethanolamine and derivatives thereof as cosmetics”. However, one of the important characteristic features of the components of Tadashi, et al. is that it contains both of two components: a “fibroblast collagenase production-promoting substance” and an “epidermal cell ceramide synthesis- promoting substance” as essential components. In Tables 2 and 4 of Tadashi, et al., the effects of Examples 1 and 2 and Comparative examples 1 to 4 are compared to each other, and as shown in Comparative examples, in a cosmetic which contains either one of the “fibroblast collagenase production-promoting substance” or “epidermal cell ceramide synthesis-promoting substance”, not both, no

excellent effect can be obtained. In addition, as an example of the “fibroblast collagenase production-promoting substance”, there are exemplified by “serine and a derivative thereof, or ethanolamine and derivatives thereof”, but only the materials which are actually used in the working Examples of Tadashi, et al. are “serine” (Example 1) or “silk fiber partial hydrolyzate” (Example 2) alone.

Moreover, the effects confirmed in working Examples of Tadashi, et al. are improvement in skin viscoelasticity, skin roughness, and tension or wrinkling of skin, and there is no description about “a skin moisture retention ability improving effect” of the present invention. Furthermore, there is no description in Tadashi, et al. about use of the disclosed compounds of Tadashi, et al. in combination with an ammonium salt or ions thereof. Accordingly, we consider it would be extremely difficult from the description of Tadashi, et al. to expect the effect of the “skin moisture retention ability improving agent” of the present invention.

For at least the foregoing reasons, Applicants respectfully submit that the rejection is improper and should be withdrawn.

Conclusion:

Based on the foregoing amendments and remarks, Applicants respectfully submit that the claims are in condition for allowance, which allowance is earnestly solicited. If, in the opinion of the Examiner, a telephone conference would advance prosecution of the Application, the Examiner is invited to call the undersigned attorneys.

PETITION FOR EXTENSION OF TIME

Applicants hereby petition under 37 C.F.R. § 1.136 for an extension of time to reply of THREE MONTHS the fee of \$555.00 required therefor under 37 C.F.R. § 1.17(a) is paid herewith by credit card. Form PTO-2038 accompanies this paper. If Form PTO-2038 is missing, cannot be processed, or authorizes insufficient payment, the Director is hereby authorized to debit Deposit Account 10-1250 for any shortfall in fees due herewith.

Respectfully submitted,

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